

(b) culturing the host cells of step (a) under conditions which allow expression of the human uncoupling protein 3 from the expression vector; and,

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Final

(c) isolating the human uncoupling protein 3 away from the host cells of step (b).

R E M A R K S

A Petition to Extend Time under 37 C.F.R. § 1.136(a) for three (3) months, up to and including Monday, July 5, 1999 is enclosed.

In response to a Restriction Requirement, Applicants elected Group I, claims 1-12, 16-31 and 35-38, drawn to DNA molecules encoding UCP3. In response to this election, Applicants cancel claims 13-15, 32-34 and 39-48 (Groups II -III). Applicants hereby reserve the right to pursue the subject matter recited in original claims 13-15, 32-34 and 39-48 in one or more subsequent continuing applications.

Claims 10-12, 20-31 and 35-38 are cancelled, without prejudice. Applicants hereby reserve the right to pursue the subject matter of these claims in a further continuing application.

Claims 1, 3, 16 and 17 are amended as suggested by the Examiner to more particularly point out and distinctly claim this portion of Applicants invention. No new matter is added by amendment to claims 1, 3, 16 and 17.

A Declaration of co-inventors Qingyun Liu and Fang Chen under 37 C.F.R. §1.131 is entered in support of this Amendment. Please charge any fees associated with entry of this declaration to Deposit Account No. 13-2755.

Objection to the Claims

Claims 1, 3, 16, 17, 20, 22, 35 and 36 were objected to for including nucleotide or amino acid sequences. This objection is overcome by amendment to claims 1, 3, 16 and 17 as well as cancellation of claims 20, 22, 35 and 36.

Claim 36 was objected to in light of an editorial oversight. This objection is overcome by cancellation of claim 36.

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Rejection of Claims 10-12, 18, 29-31 and 37 Under U.S.C. §112, Second Paragraph

Claims 10-12, 18, 29-31 and 37 were rejected under 35 U.S.C. §112, second paragraph, allegedly as being indefinite for “failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.”

Applicants respectfully overcome this rejection in part by cancellation of claims 10-12, 29-31 and 37.

Applicants respectfully overcome the remainder of the rejection by amending claim 18 to recite a final step of purifying the expressed human UCP3 protein away from the host cell and other contaminants.

Support for amendment to original claim 18 can be found at page 25, lines 6-13.

Rejection of Claims 3 and 17 Under 35 U.S.C. §102(a)

Claims 3 and 17 were rejected under 35 U.S.C. §102(a) as allegedly “being anticipated by Boss et al.” Applicants respectfully overcome this rejection by entry of a Declaration under 37 C.F.R. §1.131 from co-inventors Qingyun Liu and Fang Chen, which establishes completion of the invention recited in claims 3 and 17 at a date prior to the alleged effective date of Boss et al., May 12, 1997. Exhibit A of the Declaration shows a redacted photocopy of Notebook page 173 and attachments to page 173 from Fang Chen’s laboratory notebook which disclosed the final stages of nucleotide sequence and comparison of complete amino acid sequence of human UCP3 with human UCP1 and human UCP2. In view of entry of this Rule 131 Declaration, Applicants respectfully take the position that the rejection is moot and should therefore be withdrawn as it relates to claims 3 and 17.

Rejection of Claims 21, 22 and 36 Under 35 U.S.C. §102(a)

Claims 3 and 17 were rejected under 35 U.S.C. §102(a) as allegedly “being anticipated by Sanchis et al. with evidence by Naeve et al.” Applicants respectfully overcome this rejection by cancellation of claims 21, 22 and 36. Withdrawal of the rejection is therefore proper.

Rejection of Claims 20 and 21 Under 35 U.S.C. §102(e)

Claims 20 and 21 were rejected under 35 U.S.C. §102(e) as allegedly "being anticipated by Zhang et al. with evidence by Naeve et al." Applicants respectfully overcome this rejection by cancellation of claims 20 and 21. Withdrawal of the rejection is therefore proper.

Rejection of Claim 22 Under 35 U.S.C. §102(e)

Claim 22 was rejected under 35 U.S.C. §102(e) as allegedly "being anticipated by Sanchis et al with evidence by Naeve et al." Applicants respectfully overcome this rejection by cancellation of claims 21, 22 and 36. Withdrawal of the rejection is therefore proper.

Rejection of Claims 2 and 3 Under 35 U.S.C. §103(a)

Claims 2 and 3 were rejected under 35 U.S.C. §103(a), allegedly "as being unpatentable over Boss et al in view of Lee et al." Applicants respectfully overcome this rejection by entry of the Declaration under 37. C.F.R. §1.131 of Qingyun Liu and Fang Chen. As noted above, the declaration and attached Exhibit A establish a conception and reduction to practice of the claimed invention recited in claims 3 and 17 prior to the May 12, 1997. Exhibit A of the Declaration shows a redacted photocopy of Notebook page 173 and attachments to page 173 from Fang Chen's laboratory notebook which disclosed the final stages of nucleotide sequence and comparison of complete amino acid sequence of human UCP3 with human UCP1 and human UCP2. In view of entry of the above-mentioned declaration, Applicants respectfully take the position that this §103(a) rejection has been overcome. Therefore, Applicants respectfully request that this §103(a) be withdrawn.

Rejection of Claims 23, 26, 29, 37 and 38 Under 35 U.S.C. §103(a)

Claims 23, 26, 29, 37 and 38 were rejected under 35 U.S.C. §103(a), allegedly "as being unpatentable over Zhang et al with evidence by Neave et al. Applicants respectfully overcome the rejection by cancellation of claims 23, 26, 29, 37 and 38. Therefore, withdrawal of the rejection is proper and hereby requested.

Rejection of Claims 24, 27 and 30 Under 35 U.S.C. §103(a)

Claims 24, 27 and 30 were rejected under 35 U.S.C. §103(a), allegedly "as being unpatentable over Zhang et al with evidence by Neave et al., in view of Scorer et al. Applicants respectfully overcome the rejection by cancellation of claims 24, 27 and 30. Therefore, withdrawal of the rejection is proper and hereby requested.

Rejection of Claims 23, 26, 29, 37 and 38 Under 35 U.S.C. §103(a)

Claims 23, 26, 29, 37 and 38 were rejected under 35 U.S.C. §103(a), allegedly "as being unpatentable over Zhang et al with evidence by Neave et al. Applicants respectfully overcome the rejection by cancellation of claims 23, 26, 29, 37 and 38. Therefore, withdrawal of the rejection is proper and hereby requested.

Rejection of Claims 25, 28 and 31 Under 35 U.S.C. §103(a)

Claims 25, 28 and 31 were rejected under 35 U.S.C. §103(a), allegedly "as being unpatentable over Zhang et al with evidence by Neave et al., in view of Studier et al. Applicants respectfully overcome the rejection by cancellation of claims 25, 28 and 31. Therefore, withdrawal of the rejection is proper and hereby requested.

Rejection of Claim 35 Under 35 U.S.C. §103(a)

Claim 35 was rejected under 35 U.S.C. §103(a), allegedly "as being unpatentable over Zhang et al with evidence by Neave et al. Applicants respectfully overcome the rejection by cancellation of claim 35. Therefore, withdrawal of the rejection is proper and hereby requested.

Rejection of Claim 36 Under 35 U.S.C. §103(a)

Claim 36 was rejected under 35 U.S.C. §103(a), allegedly "as being unpatentable over Zhang et al. Applicants respectfully overcome the rejection by cancellation of claim 36. Therefore, withdrawal of the rejection is proper and hereby requested.

CONCLUSION

Applicants respectfully submit that the objection to the claims, §§102(b), 112, second paragraph and 103(a) rejections have been overcome and that the remaining claims are in proper for allowance. Early action to that end is earnestly solicited.



The Examiner is invited to contact the undersigned attorney if clarification is required on any aspect of this response, or if any of the claims are considered to require further amendment to be placed in condition for allowance after entry of this Amendment.

Respectfully submitted,



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